

Application No.: 09/547,369

Docket No.: 20421-00059-US

AMENDMENTS TO THE CLAIMS

Kindly amend the claims as follows:

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1. (Original) A method comprising:

receiving a data frame on a receive port from a first device connected to a network, said data frame including a source media access control (MAC) address for said first device and a destination MAC address for a second device connected to said network;

forwarding said data frame to a target port corresponding to said second device; and

learning said source MAC address locally to said target port.

2. (Amended) The method of claim 1, said learning step comprising:

determining whether said source MAC address is present in a database local to said target port; and

recording said source MAC address along with a port connected to said first device in said local database if not present.

3. (Original) The method of claim 1, further comprising performing frame forwarding using said locally-learned MAC address.

4. (Original) The method of claim 2, further comprising aging said MAC address locally.

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5. (Original) The method of claim 2, further comprising:

bundling a pre-determined number of said MAC addresses into a reply in response to a report request from a control point; and

transmitting said reply to said control point.

6. (Original) The method of claim 5, further comprising:

compiling a plurality of said replies into an aggregate database; and

reporting said aggregate database to a network user or manager.

7. (Original) The method of claim 5, wherein said report request is issued at time intervals which are configurable by a network user.

8. (Amended) A network switch comprising:

a target port connected to a destination network device;

processors and a MAC address database local to said target port;

an ingress port;

said processors programmed to perform MAC address learning locally to said target port source addresses and source ports contained in a frame received from said ingress port.

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9. (Amended) A network switch comprising:

a target port connected to a network device;

processors and a MAC address database local to said target port;

an ingress port;

said processors programmed to perform MAC address learning locally to  
said target port of source addresses and source ports contained in frames received  
by said ingress port.

10. (Original) The network switch of claim 8, said processors  
programmed to perform frame forwarding using said local MAC address  
database.

11. (Original) The network switch of claim 8, said processors  
programmed to perform aging of said local MAC address database.

12. (Original) The network switch of claim 8, a database-handling  
processor of said processors programmed to bundle a pre-determined number of  
said MAC addresses into a reply in response to a report request from a control  
point included on said switch, and transmit said reply to said control point.

13. (Original) The network switch of claim 12, said control point  
compiling a plurality of said replies into an aggregate database and reporting said  
aggregate database to a network user or manager.

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14. (Original) A computer-readable medium storing computer-executable instructions, said instructions when executed by a processor implementing a method comprising:

receiving a data frame on a receive port from a first device connected to a network, said data frame including a source media access control (MAC) address for said first device and a destination MAC address for a second device connected to said network;

forwarding said data frame to a target port corresponding to said second device; and

learning said source MAC address locally to said target port.

  
15. (Original) The computer-readable medium of claim 14, said learning step comprising:

determining whether said source MAC address is present in a database local to said target port; and

recording said source MAC address in said local database if not present.

16. (Original) The computer-readable medium of claim 14, said method further comprising performing frame forwarding using said locally-learned MAC address.

17. (Original) The computer-readable medium of claim 14, said method further comprising aging said MAC address locally.

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18. (Original) The computer-readable medium of claim 14, said method further comprising:

bundling a pre-determined number of said MAC addresses into a reply in response to a report request from a control point; and

transmitting said reply to said control point.

19. (Original) The computer-readable medium of claim 18, said method further comprising:

compiling a plurality of said replies into an aggregate database; and

reporting said aggregate database to a network user or manager.

20. (Original) The computer-readable medium of claim 18, wherein said report request is issued at time intervals which are configurable by a network user.